

Molecular Imaging of Infectious Diseases: Current Status and Future Challenges

September 21, 8:00 am to 5:00 pm

Natcher Conference Center, National Institutes of Health

Morning Sessions

08:00-08:30a Light Breakfast

Introduction

08:30-08:55a Challenges in Infectious Disease: Need for Imaging

Sanjay K. Jain, MD, Johns Hopkins University

09:00-09:25a Overview of Molecular Imaging

Dima A. Hammoud, MD, NIH

09:30-09:55a Molecular Imaging Tools for Cardiovascular Infection and Inflammation

Farouc A. Jaffer, MD, PhD, Massachusetts General Hospital

10:00-10:20a Coffee Break

Molecular Imaging of the Immune System: Targeting the Host

10:20-10:45a Cytokine and Chemokine Receptor Imaging

Gary D. Luker, MD, University of Michigan

10:50-11:15a Translocator Protein (TSPO) as an Inflammatory Marker

H. Charles Manning, PhD, Vanderbilt University

11:20-11:45a PET imaging of T-lymphocytes Using Reporter Genes

Caius Radu, MD, University of California, Los Angeles

11:50-12:15a Labeling of Immune Cells Using Iron Oxide Particles

Erik M. Shapiro, PhD, Yale University

12:20-01:20p Lunch and Poster Session



Afternoon sessions

Molecular Imaging of Infection: Targeting the Pathogen I

- 01:20-01:45p Optical Imaging Applications for Mycobacterial Lung Infections
Jeffrey D. Cirillo, PhD, Texas A&M
- 01:50-02:15p Imaging Viral Vector Distribution in Small Animals
Michael A. Barry, PhD, Mayo Clinic
- 02:20-02:45p Maltodextrin-based Probes to Detect Bacteria
Niren Murthy, PhD, University of California, Berkeley
- 02:50-03:10p **Coffee Break**

Molecular Imaging of Infection: Targeting the Pathogen II

- 03:10-03:35p PET Based Bacteria-Specific Tracers
Edward A. Weinstein, MD, PhD, Johns Hopkins University
- 03:40-04:05p Anti-infectious Drug Chemotherapeutics in Animal Models
Peter J. Tonge, PhD, Stony Brook University
- 04:10-04:35p Use of PET and SPECT for Detecting Bacteria in Humans
Steve Cho, MD, Johns Hopkins University
- 04:40-05:00p **Wrap up**

Please contact Dima A. Hammoud, MD (301-402-3041; hammoudd@cc.nih.gov) or Sanjay K. Jain, MD (410-502-8241; sjain5@jhmi.edu) for more information.

